

AKROMID® PRELIMINARY

A3 GF 30 9 FR black (8820)

PA66 GF30 FR(40)

AKROMID®A3 GF 30 9 FR black (8820) is a 30 % glass fibre reinforced, flame-retardant and heat-stabilized PA6.6, coloured in black similar to RAL 9005. The material is based on a flame retardant system that is free of red phosphorus, halogens, PFAS, zinc borate and melamine. This grade has a V0 classification from a wall thickness of 1.6 mm and is characterized by high flowability and beautiful surfaces.

Features

heat stabilised 130 electrically neutral flame retardant surface modified easy flow process improved E&E

E-Mobility

Properties

Modulus

10.500 MPa

Strength

150 MPa

Impact

65 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

10500 MPa

1 mm/min | conditioned

7200 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

150 MPa

5 mm/min | conditioned

105 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,5 %

5 mm/min | conditioned

4,5 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

65 kJ/m²

23°C | conditioned

65 kJ/m²

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

10 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A	1,8 MPa	246 °C
ISO 75		

Melting temperature	DSC, 10K/min	262 °C
ISO 11357-3		

Flammability

Flammability	1,6 mm Wall thickness	V0 Class
UL 94	3,2 mm Wall thickness	V0 Class

General Properties

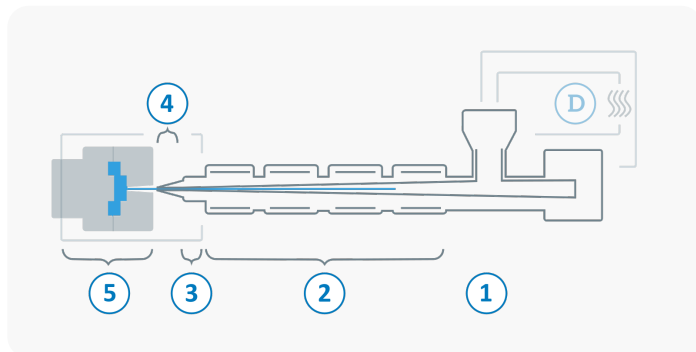
Density	23°C	1,37 g/cm³
ISO 1183		

Humidity absorption	70°C, 62% r.H.	1,9 - 2,1 %
ISO 1110		

Molding shrinkage	flow	0,1 - 0,3 %
ISO 294-4	transverse	0,7 - 0,9 %

Processing

The values mentioned are recommendations. We only recommend desiccant / dry air dryers or vacuum dryers. Too long a drying time and the resulting residual moisture content below the lower limit can lead to filling problems and surface defects. The specified drying time refers to closed and undamaged bagged material. When processing from previously opened bags or from octabins with polyolefin inliners, a longer drying time may be necessary. It is recommended to check the residual moisture content after the drying process.



D	Drying time	2 - 4 h
	Drying temperature ($\tau \leq -30^{\circ}\text{C}$)	80 °C
	Processing moisture	0,02 - 0,08 %
1	Feed section	60 - 80 °C
2	Temperature Zone 1 - Zone 4	260 - 290 °C
3	Nozzle temperature	260 - 300 °C
4	Melt temperature	270 - 290 °C
5	Mold temperature	60 - 100 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	30 - 100 bar
	Injection speed	medium
	Screw speed	5 - 10 m/min